

SHIFT REPORT

MINOTON Mining Products/Services

DATE 8-5-85 SHIFT: DAY ☒ NIGHT ☐
JOB NO. 48218 LOC. Paco DRILL NO. B-80 HOLE NO. EE-3
DRILLER H.L. Franklin HELPER Ken (4) Miller

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES <small>SIZE</small>	FONDU
CORE RECOVERED			PORTLAND
NUMBER OF RUNS			
SIZE OF HOLE			

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6	<u>decon</u>		<u>(8)</u>
.2	ROTARY			.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE	<u>#</u>	
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) trouble with burner
on pressure washer

FOREMAN

GEOLOGIST

054007A



CUSTOMER

USEPA SF



1452440

SHIFT REPORT

NONION Mining Products/Services

DATE 8-8-85 SHIFT: DAY ✓ SWING _____ NITE _____
JOB NO. 48-218 LOC. Pasco DRILL NO. B-80 HOLE NO. _____
DRILLER W. J. J. J. HELPER Artie & Ken

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES <small>SIZE</small>	FONDU
CORE RECOVERED			PORTLAND
NUMBER OF RUNS			
SIZE OF HOLE			
		<u>Pelltop 36</u>	

FEET CASSED FROM _____ TO _____ SIZE _____
FEET REAMED FROM _____ TO _____ SIZE _____

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	ROTARY			.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	<u>11</u> HOURS	MILES

BITS			
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
REASON FOR RETIRING			

REMARKS (Explain delays and hole condition)
(137 total drums were used on this job)
centralizing drums

SHIFT REPORT

MINION Mining Products/Services

DATE 8-7-85 SHIFT: DAY 1 SWING NITE
JOB NO. 48-218 LOC Pasco DRILL NO. B-80 HOLE NO.
DRILLER Willie HELPER Rex & Artie

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES <small>SIZE</small>	FONDU
CORE RECOVERED			PORTLAND
NUMBER OF RUNS			
SIZE OF HOLE		Drums 34	

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	ROTARY			.6	<u>decon</u>		
.3	REAM			.7	MOB-DE MOB	<u>17</u>	<u>9</u>
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			10	WEATHER		
.6	WASH/CLEANING HOLE			11	HOLE		
.6	REGAINED LOST CIR.			12	OTHER		
.6	OTHER SERVICES			13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) finished decon & took
trip to Spokane and picked up pallet for
drums to be stored on

SHIFT REPORT

NONION Mining Products/Services

DATE 8-6-85 SHIFT: DAY ☒ NIGHT ☐
JOB NO. 48-218 LOC. Proco DRILL NO. B-80 HOLE NO. FF-2
DRILLER Artie Auger HELPER Ken + Willie

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2	<u>2</u>	SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT	<u>88</u>	MUD 25 (2 LB. BAG)		AIR-QUIK	
DEPTH, START OF SHIFT		FLUID PLUG		CALSEAL	
DRILLED		CORE BOXES	SIZE	FONDU	
CORE RECOVERED		<u>concrete</u>	<u>8</u>	PORTLAND	<u>3</u>
NUMBER OF RUNS		<u>Pellets</u>	<u>1</u>		
SIZE OF HOLE		<u>fine sand</u>	<u>1</u>		
		<u>coarse sand</u>	<u>6</u>		

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6	<u>dcon</u>		<u>(4)</u>
.2	ROTARY <u>auger</u>	<u>2</u>		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	<u>4</u>		.8	MOVE	<u>2</u>	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) used 70' of casing
& 22' of screen water at 76.11

FOREMAN William L. Franklin GEOLOGIST
054007A (P) M CUSTOMER

SHIFT REPORT

MORTON Mining Products/Services

DATE 8-4-85 SHIFT: DAY _____ SWING _____ NITE _____
 JOB NO. 48-218 LOC. Pasco DRILL NO. B-80 HOLE NO. EF-3
 DRILLER H. L. Franklin HELPER Willie & Curtis

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2	<u>5</u>	SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT	<u>817</u>	MUD 25 (2 LB. BAG)		AIR-QUIK	
DEPTH, START OF SHIFT	<u>7</u>	FLUID PLUG		CALSEAL	
DRILLED	<u>80</u>	CORE BOXES	SIZE	FONDU	
CORE RECOVERED				PORTLAND	<u>6</u>
NUMBER OF RUNS		<u>compressand</u>	<u>6</u>	<u>Pellets</u>	<u>3</u>
SIZE OF HOLE		<u>fine sand</u>	<u>1</u>		

FEET CASED FROM _____ TO _____ SIZE _____
 FEET REAMED FROM _____ TO _____ SIZE _____

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	Auger <u>Auger</u>	<u>4</u>		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	<u>5</u>		.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER	<u>2</u>	
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. _____ SIZE & TYPE _____ DEPTH OFF _____ DEPTH ON _____
 BIT NO. _____ SIZE & TYPE _____ DEPTH OFF _____ DEPTH ON _____

REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition)

water at 65 - used 2' screen section &
67 feet of casing

FOREMAN

GEOLOGIST

054007A (P)

CUSTOMER

SHIFT REPORT

NONION Mining Products/Services

DATE 7-13-85 SHIFT: DAY SWING NITE
JOB NO. 48-218 LOC. Pasco DRILL NO. HOLE NO.
DRILLER John L. Franklin HELPER Ken Jones

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2		SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)		AIR-QUIK	
DEPTH, START OF SHIFT		FLUID PLUG		CALSEAL	
DRILLED		CORE BOXES	SIZE	FONDU	
CORE RECOVERED				PORTLAND	
NUMBER OF RUNS					
SIZE OF HOLE					

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	ROTARY			.6			
.3	REAM			.7	MOB-DE MOB	4	
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE	3	
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) Tried to help shop come up with a better method of getting dressing off of new auger

FOREMAN GEOLOGIST
054007A (P) CUSTOMER

SHIFT REPORT

NORTON Mining Products/Services

DATE 7-15-83 SHIFT: DAY ☒ SWING ☐ NITE ☐
JOB NO. 48-188 LOC. Pasco DRILL NO. HOLE NO.
DRILLER Sk. L. Franklin HELPER Ken Jones

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES	FONDU
CORE RECOVERED			PORTLAND
NUMBER OF RUNS			
SIZE OF HOLE			

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
1	CORE			.6	<u>De-CON</u>		<u>①</u>
.2	ROTARY			.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE	<u>10</u>	
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) finally got logs
cleaned up & re cemented

SHIFT REPORT

HOWTON Mining Products/Services

DATE 7-16-85 SHIFT: DAY ☒ SWING ☐ NITE ☐
JOB NO. 48-188 LOC. Pasco DRILL NO. EE-1
DRILLER Sh. L. Franklin HELPER Ken Jones

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT	<u>A</u>	MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT	<u>23 43</u>	MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT	<u>0</u>	FLUID PLUG	CALSEAL
DRILLED		CORE BOXES	SIZE
CORE RECOVERED			FONDU
NUMBER OF RUNS			PORTLAND
SIZE OF HOLE			

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	RE <u>auger</u> <u>12</u>			.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition)

SHIFT REPORT

NORTON Mining Products/Services

DATE 7-17-85 SHIFT: DAY ✓ SWING _____ NITE _____
 JOB NO. 48218 LOC. Perco DRILL NO. _____ HOLE NO. EE-4
 DRILLER J. L. Franklin HELPER Ken Jones & Art Brownson

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	<u>2'</u>
STICKUP, END OF SHIFT		LIGNITE	
DEPTH, END OF SHIFT	<u>72</u>	MUD 25 (2 LB. BAG)	
DEPTH, START OF SHIFT	<u>0</u>	FLUID PLUG	
DRILLED "	<u>72</u>	CORE BOXES	SIZE _____
CORE RECOVERED			PORTLAND <u>7</u>
NUMBER OF RUNS		<u>Coarse Sand 4</u>	
SIZE OF HOLE		<u>Fine Sand 1</u>	
		<u>Bentonite Pellets 1</u>	

FEET CASSED 72 FROM +2 TO 70' SIZE 2"
 FEET REAMED _____ FROM _____ TO 20' of screen SIZE _____

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
1	CORE			6	<u>Pack & Plug 2</u>		
2	<u>Auger</u>	<u>5</u>		6	<u>decub</u>		<u>③</u>
3	REAM			7	MOB-DE MOB		
4	CASE	<u>31</u>		8	MOVE	<u>2</u>	
5	CEMENT/RE DRILL			9	MAINTENANCE		
6	STANDBY/SURVEY			10	WEATHER		
6	WASH/CLEANING HOLE			11	HOLE		
6	REGAINED LOST CIR.			12	OTHER		
6	OTHER SERVICES			13	WATER HAUL DRIVER	HOURS _____	MILES _____

BITS

BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON

REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) drilled first to coarse sand
with very little gravel. Water table at 45'
sanded every foot to 70'

FOREMAN _____ GEOLOGIST _____
 054007A (P) CUSTOMER _____

SHIFT REPORT

NEWTON Mining Products/Services

 DATE 7-18-85 SHIFT: DAY V SWING NITE
 JOB NO. 48-218 LOC. Asco DRILL NO. HOLE NO. EE-4
 DRILLER St. L. Franklin HELPER Ken Jones & Taronson

FOOTAGE		MATERIAL USED	
RODS. END OF SHIFT		MUD 2	SODA ASH
STICKUP. END OF SHIFT		LIGNITE	ST-200
DEPTH. END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH. START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES	SIZE FONDUE
CORE RECOVERED			PORTLAND 2
NUMBER OF RUNS		Coarse Sand 1	
SIZE OF HOLE		Napa Sand 2	
		55 gal. Round 12	

 FEET CASSED FROM TO SIZE
 FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	ROTARY			.6	Decon	8	
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE	1	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

 BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
 BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) decon & move on next hole

NORTON Mining Products/Services

CUSTOMER

SHIFT REPORT

NORTON Mining Products/Services

DATE 7-20 SHIFT: DAY ✓ SWING _____ NITE _____
JOB NO. 48-218 LOC. Pasco DRILL NO. B80 HOLE NO. EE5
DRILLER Ken HELPER Skinner & Artie

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2		SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT	<u>72</u>	MUD 25 (2 LB. BAG)	<u>2</u>	AIR-QUIK	
DEPTH, START OF SHIFT	<u>0</u>	FLUID PLUG		CALSEAL	
DRILLED	<u>72</u>	CORE BOXES	SIZE	FONDU	
CORE RECOVERED		<u>Coarse Si.</u>		PORTLAND	<u>2</u>
NUMBER OF RUNS		<u>Fine Sand</u>			
SIZE OF HOLE		<u>Pellets</u>			

FEET CASSED 72 FROM 0 TO 72 SIZE _____
FEET REAMED _____ FROM _____ TO _____ SIZE _____

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	<u>Aughr</u>	<u>3</u>		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	<u>6</u>		.8	MOVE	<u>3</u>	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON

REASON FOR RETIRING _____

REMARKS (Explain delays and hole condition) Sand & small gravel
water table 50'

22 feet of Screen. + 55' of casing
FOREMAN Chas. Franklin GEOLOGIST _____

SHIFT REPORT

MONTANA Mining Products/Services

DATE 7-22-85 SHIFT: DAY ✓ SWING NITE
JOB NO. 48-218 LOC. Pasco DRILL NO. B80 HOLE NO. EE 5
DRILLER W. L. Franklin HELPER Arti Orson

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES <small>SIZE</small>	FONDU
CORE RECOVERED			PORTLAND <u>2</u>
NUMBER OF RUNS			
SIZE OF HOLE		<u>intermix</u> <u>4</u>	
		<u>Drams</u> <u>14</u>	

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6	<u>Decon</u>		<u>(8)</u>
.2	ROTARY			.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE	<u>1</u>	
.5	CEMENT/RE DRILL			.9	MAINTENANCE	<u>2</u>	
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) De coned & moved rig up hill to next hole. added Hyd oil & had some minor repair & adjustment. scrapped 50' of casing & 20' of screen from EE 5

FOREMAN

GEOLOGIST

SHIFT REPORT

NONION Mining Products/Services

DATE 7-23-85 SHIFT: DAY ✓ SWING NITE
JOB NO. 48218 LOC. Pasco DRILL NO. B80 HOLE NO. EE-8
DRILLER Arter HELPER Ron + Mike

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2		SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT	<u>103</u>	MUD 25 (2 LB. BAG)	<u>3</u>	AIR-QUIK	
DEPTH, START OF SHIFT		FLUID PLUG		CALSEAL	
DRILLED		CORE BOXES	SIZE	FONDU	
CORE RECOVERED		<u>Pollito 1</u>		PORTLAND	<u>4</u>
NUMBER OF RUNS		<u>fine sand 1</u>			
SIZE OF HOLE		<u>coarse sand 4</u>			

FEET CASSED 100 FROM 0 TO 100 SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	auger	<u>4</u>		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	<u>7</u>		.8	MOVE	<u>3</u>	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) used 22' of screen & 85' of casing. Had some trouble keeping casing down hole.

SHIFT REPORT

WILSON Mining Products/Services

DATE Dec 24 SHIFT: DAY ☒ NIGHT ☐
JOB NO. 18-28 LOC. Pasco DRILL NO. B-80 HOLE NO. EE-8
DRILLER Joe L. Franklin HELPER Artie & Ken

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2		SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)		AIR-QUIK	
DEPTH, START OF SHIFT		FLUID PLUG		CALSEAL	
DRILLED		CORE BOXES	SIZE	FONDU	
CORE RECOVERED				PORTLAND	
NUMBER OF RUNS		<u>cored 10</u>			
SIZE OF HOLE		<u>Drums 17</u>			

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	ROTARY			.6	<u>Decon</u>		<u>8</u>
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE	<u>1</u>	
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER <u>well comp</u>		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) had to repair Pressure washer & put cement pad on EE-5 & 8.

SHIFT REPORT

NORTON Mining Products/Services

 DATE July 25 SHIFT: DAY ✓ SWING ✓ NITE ✓
 JOB NO. 48-218 LOC. Pasco DRILL NO. B 80 HOLE NO. FF 9
 DRILLER Willie HELPER Art & Ken

FOOTAGE		MATERIAL USED	
RODS. END OF SHIFT		MUD 2	4
STICKUP. END OF SHIFT		LIGNITE	
DEPTH. END OF SHIFT	97	MUD 25 (2 LB. BAG)	
DEPTH. START OF SHIFT		FLUID PLUG	
DRILLED		CORE BOXES	SIZE
CORE RECOVERED		Coarse Sand 2 Fine Sand 7	
NUMBER OF RUNS			PORTLAND 84
SIZE OF HOLE			

 FEET CASED FROM TO SIZE
 FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER		BOYLES	CUSTOMER
1	CORE			.6		
2	REAM <u>auger</u>	3		.6		
3	REAM			.7	MOB-DE MOB	
4	CASE	6		.8	MOVE	1
5	CEMENT/RE DRILL			.9	MAINTENANCE	1
6	STANDBY/SURVEY			.10	WEATHER	
6	WASH/CLEANING HOLE			.11	HOLE	
6	REGAINED LOST CIR.			.12	OTHER	
6	OTHER SERVICES			.13	WATER HAUL DRIVER	
					HOURS	MILES

BITS

BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition)
installed 75' of casing
+ 22' screen. water table 176'
occasional gravel from 80' on down

 FOREMAN PM GEOLOGIST
 054007A PM CUSTOMER

NORTON Mining Products/Services

FOREMAN	GEOLOGIST
Q54007A (P) M	CUSTOMER

SHIFT REPORT

NONION Mining Products/Services

DATE 7-29-85 SHIFT: DAY SWING NITE
JOB NO. 18-28 LOC. Pasco DRILL NO. B-80 HOLE NO. FF-7
DRILLER Xen HELPER Willie Carter

FOOTAGE		MATERIAL USED			
RODS, END OF SHIFT		MUD 2		SODA ASH	
STICKUP, END OF SHIFT		LIGNITE		ST-200	
DEPTH, END OF SHIFT	<u>102</u>	MUD 25 (2 LB. BAG)		AIR-QUIK	
DEPTH, START OF SHIFT		FLUID PLUG		CALSEAL	
DRILLED		CORE BOXES	SIZE	FONDU	
CORE RECOVERED		<u>Coarse Sand 3</u>		PORTLAND	<u>2</u>
NUMBER OF RUNS		<u>fine sand 1</u>			
SIZE OF HOLE					

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE	<u>3</u>		.6			
.2	ROTARY			.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	<u>6</u>		.8	MOVE	<u>2</u>	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			10	WEATHER		
.6	WASH/CLEANING HOLE			11	HOLE		
.6	REGAINED LOST CIR.			12	OTHER		
.6	OTHER SERVICES			13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition)
Put in 22' screen section & 80' of screen. Bottom of dump at 100'.

FOREMAN GEOLOGIST
054007A (P) M CUSTOMER

SHIFT REPORT

MORTON Mining Products/Services

DATE 7-30-85 SHIFT: DAY SWING NITE
 JOB NO. 48-218 LOC. Pasco DRILL NO. B-80 HOLE NO. EE-7
 DRILLER Waller HELPER Patie & Ken

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES	SIZE
CORE RECOVERED			FONDU
NUMBER OF RUNS			PORTLAND
SIZE OF HOLE		<u>concrete 4</u>	
		<u>Drums 14</u>	

FEET CASSED FROM TO SIZE
 FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	ROTARY			.6	<u>Decon</u>		<u>(P)</u>
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE		
.5	CEMENT/RE DRILL			.9	MAINTENANCE	<u>1</u>	
.6	STANDBY/SURVEY			10	WEATHER		
.6	WASH/CLEANING HOLE			11	HOLE		
.6	REGAINED LOST CIR.			12	OTHER		
.6	OTHER SERVICES			13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
 BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition)

FOREMAN

GEOLOGIST

054007A (P)

CUSTOMER

SHIFT REPORT

MINOTON Mining Products/Services

DATE 7-31-85 SHIFT: DAY V SWING NITE
JOB NO. 48-218 LOC. Pasco DRILL NO. B-80 HOLE NO. FE6
DRILLER Artie Auger HELPER Ken & Willie

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	3
STICKUP, END OF SHIFT		LIGNITE	
DEPTH, END OF SHIFT	102	MUD 25 (2 LB. BAG)	
DEPTH, START OF SHIFT		FLUID PLUG	
DRILLED		CORE BOXES	SIZE
CORE RECOVERED		coarse sand	3
NUMBER OF RUNS		fine sand	1
SIZE OF HOLE		PORTLAND	2

FEET CASSED 99.5 FROM 0 TO 99.5 SIZE 2" ID
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	auger	3		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	5		.8	MOVE	3	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) finer sand 0-45 coarse 45-
some gravel 90-102 installed 80 feet of casing
& 22 feet of screen section

FOREMAN W. L. Franklin GEOLOGIST
054007A © m CUSTOMER

SHIFT REPORT

NONION Mining Products/Services

DATE 8-1-85 SHIFT: DAY ✓ NIGHT
JOB NO. 48218 LOC. Pasco DRILL NO. B-80 HOLE NO. FF-6
DRILLER Willie HELPER Ken & Artie

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES	SIZE
CORE RECOVERED			FONDU
NUMBER OF RUNS			PORTLAND
SIZE OF HOLE			<u>concrete 14</u>
		<u>drum</u>	<u>14</u>

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
1	CORE			.6			
2	REAM <u>auger</u>			.6	<u>Decon</u>		<u>⑦</u>
3	REAM			.7	MOB-DE MOB		
4	CASE			.8	MOVE	<u>2</u>	
5	CEMENT/RE DRILL			.9	MAINTENANCE		
6	STANDBY/SURVEY			.10	WEATHER		
6	WASH/CLEANING HOLE			.11	HOLE		
6	REGAINED LOST CIR.			.12	OTHER		
6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition)

FOREMAN William L. Franklin GEOLOGIST
054007A (P) CUSTOMER

SHIFT REPORT

MURKIN Mining Products/Services

DATE 8-2-85 SHIFT: DAY ☒ NIGHT ☐
JOB NO. 48-218 LOC. Pasco DRILL NO. B-80 HOLE NO. EE-1
DRILLER Franklin HELPER Ken & Art

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	2
STICKUP, END OF SHIFT		LIGNITE	
DEPTH, END OF SHIFT	88	MUD 25 (2 LB. BAG)	
DEPTH, START OF SHIFT		FLUID PLUG	
DRILLED		CORE BOXES	SIZE
CORE RECOVERED			FONDU
NUMBER OF RUNS			PORTLAND
SIZE OF HOLE			

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6			
.2	CORE Auger	3		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE	4		.8	MOVE	2	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON
BIT NO.	SIZE & TYPE	DEPTH OFF	DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) 69 feet of casing
22' screen sections 64' water table

SHIFT REPORT

MINION Mining Products/Services

DATE 8-3-85 SHIFT: DAY ☒ NIGHT ☐
 JOB NO. 48-218 LOC. Pasco DRILL NO. B-80 HOLE NO. EE-1 & EE-3
 DRILLER Ken HELPER Artie & Willie

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT	<u>7</u>	MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES <small>SIZE</small>	FONDU
CORE RECOVERED			PORTLAND
NUMBER OF RUNS			
SIZE OF HOLE		<u>concrete mix 5</u>	

FEET CASSED FROM TO SIZE
 FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
.1	CORE			.6	<u>Decon</u>	<u>5</u>	
.2	<u>angel</u>	<u>1</u>		.6			
.3	REAM			.7	MOB-DE MOB		
.4	CASE			.8	MOVE	<u>3</u>	
.5	CEMENT/RE DRILL			.9	MAINTENANCE		
.6	STANDBY/SURVEY			.10	WEATHER		
.6	WASH/CLEANING HOLE			.11	HOLE		
.6	REGAINED LOST CIR.			.12	OTHER		
.6	OTHER SERVICES			.13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
 BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) decon #1 & pour pad
move on to #3 & start hole. stopped because
of potential gas leak (no barrel on EE-1)
 FOREMAN GEOLOGIST

SHIFT REPORT

MINOR Mining Products/Services

DATE 7-10-85 SHIFT: DAY SWING NITE
JOB NO. 48-218 LOC Lasca DRILL NO. HOLE NO.
DRILLER St. L. & Franklin HELPER Artie & Ken

FOOTAGE		MATERIAL USED	
RODS, END OF SHIFT		MUD 2	SODA ASH
STICKUP, END OF SHIFT		LIGNITE	ST-200
DEPTH, END OF SHIFT		MUD 25 (2 LB. BAG)	AIR-QUIK
DEPTH, START OF SHIFT		FLUID PLUG	CALSEAL
DRILLED		CORE BOXES	SIZE FONDUE
CORE RECOVERED			PORTLAND
NUMBER OF RUNS			
SIZE OF HOLE			

FEET CASSED FROM TO SIZE
FEET REAMED FROM TO SIZE

CASING LEFT IN HOLE	QUANTITY	SIZE	LENGTH	QUANTITY	SIZE	LENGTH
CASING SHOE			NO.			NO.

TIME CHARGES		BOYLES	CUSTOMER			BOYLES	CUSTOMER
1	CORE			6	<u>decon</u>		<u>(5)</u>
2	ROTARY			6			
3	REAM			7	MOB-DE MOB	<u>5</u>	
4	CASE			8	MOVE		
5	CEMENT/RE DRILL			9	MAINTENANCE		
6	STANDBY/SURVEY			10	WEATHER		
6	WASH/CLEANING HOLE			11	HOLE		
6	REGAINED LOST CIR.			12	OTHER		
6	OTHER SERVICES			13	WATER HAUL DRIVER	HOURS	MILES

BITS

BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON
BIT NO. SIZE & TYPE DEPTH OFF DEPTH ON

REASON FOR RETIRING

REMARKS (Explain delays and hole condition) Briggs Rig & start
decon